ABSTRACT OF THE DISCLOSURE

Apparatus and methods for regulating the appetite of an individual suffering from morbid obesity, the apparatus including a plurality of stimulation electrodes arranged longitudinally on at

least one electrode support shaft for insertion within the hypothalamus for outputting electrical discharges to specific sites within the hypothalamus. Each of the plurality of stimulation electrodes may be independently controlled. Electrical discharge of various frequencies transmitted from one or more of the plurality of stimulation electrodes, and delivered to a region of the hypothalamus that is involved with either stimulating or inhibiting appetite, may be used to regulate appetite in the individual. Alternatively, an individual's appetite may be regulated by the microinfusion from at least one microinfusion catheter of an appropriate quantity of a suitable drug to a distinct site or region within the hypothalamus.